MedCrave
Step into the World of Research

Sociology International Journal

Review Article

Open Access

CrossMark

An African construction of colonial medicine: the Sokoto people's perception and response to the British healthcare programmes

Abstract

After the conquest of the Sokoto Caliphate and the creation of the Sokoto Province in 1903, the British introduced a number of social programmes including healthcare services. However, the services met with a number of challenges especially, apathy by the people of the Province. Thus, this paper intends to bring a new perspective of African construction of colonial regime with a focus on healthcare programmes in Sokoto Province of northern Nigeria. Through consulting libraries, archival materials and interview approaches, the paper seeks to examine the bases for the ambivalent perception and reception of the British healthcare services by the Sokoto people. The paper argues that in spite of a number of legislative measures taken to ensure the acceptance of the services, there was community rejection of the services. As in the case of other areas in colonial Africa, suspicion and mistrust of colonial officers, Christian missions, western culture and the existence of indigenous belief systems were responsible for the questions regarding acceptability of western healthcare services. It is also observed that the current challenges of international healthcare programmes in the area; for instance, rejection of polio vaccine, is a spillover of Sokoto people's suspicion of British healthcare programmes.

Keywords: African construction, colonial medicine, Sokoto people and british healthcare programmes

Volume 3 Issue 5 - 2019

Labbo Abdullahi
Department of History, Usmanu Danfodiyo University, Nigeria

Correspondence: Labbo Abdullahi, Department of History, Usmanu Danfodiyo University, Sokoto, Nigeria, Tel +2348066061707; Email labboabdullahiarg@gmail.com

Received: July 22, 2019 | **Published:** September 13, 2019

Introduction

Sokoto Province was one of the British Colonial provinces of northern Nigeria. The Province was created in 1903 after the colonial conquest of the Sokoto Caliphate and the consolidation of the British rule over Nigerian area.[1] The Province was composed of five emirates; namely Sokoto, Gwandu, Argungu, Yauri and Dabai (Zuru). The emirates were the bases of the five Native Authorities (N.As) in the province with largely Muslim Hausa-speaking people.[2] British healthcare services were introduced in the province as part of the broader colonial social programmes in northern Nigeria.[3] The services were programmed and introduced by the British Colonial Government in Nigeria in order to safeguard the health of the colonial officials and the colonized. The introduction and application of colonial healthcare services to the indigenous people in the country was not out of sympathy, instead the Colonial Government realized that human and material exploitation is incompatible with poor condition of health.[4] This is believed to be the over-riding purpose for the British healthcare programmes in Sokoto especially, preventive aspect of the programmes for the control of communicable diseases that threatened the well-being of the colonial officials in the province. On the other hand, little attention was comparatively given to the curative aspect of the programmes by the Colonial Government; and policies were formulated directing N.As in the province to establish medical institutions for curative services.[5,6] In accordance with the policies, a number of medical institutions were established and run by the N.As. Similarly, some special institutions were later established by the Government and thus, the institutions as well as preventive programmes in the province were concurrently managed by the N.As and the central Government.[7] However, quite a number of the indigenous people in the province were not receptive of both preventive and curative programmes up to the end of British colonial regime in the area. The poor reception of the programmes was believed to have originated from the people's perception of colonial regime and its major actors, especially colonial officials; and that informed the Sokoto people's construction of colonial medicine. Thus, this paper intends to contribute to the existing literature by bringing Sokoto peoples' construction of the British healthcare programmes.

Study area

Sokoto Province under study refers to all the territories of the former Sokoto, Gwandu, Argungu Yauri and Dabai Emirates (Native Authorities) that were centrally administered by the British colonial officers with headquarters at Sokoto in northern Nigeria. Presently, the territories constitute fifty-eight (58) local government areas in Sokoto, Kebbi and Zamfara States. The province was created by the British in 1903, comprising Sokoto, Gwandu and Argungu Emirates. In 1924, Yauri and Dabai Emirates were merged with Sokoto Province after the dismantling of Kontagora Province.[8–10] Thus, the study area constituted the five emirates of Sokoto, Gwandu, Argungu Yauri and Dabai now, Zuru. Sokoto Emirate was the largest of the five emirates; making up the modern-day Sokoto and Zamfara States. The other four emirates of Gwandu, Argungu, Yauri and Zuru are conflated in Kebbi State.

Methodology

In this historical study, qualitative content analysis was utilized to interpret both primary and secondary sources of data on the subject matter. The primary sources include archival materials that are deposited in Arewa House Archives Kaduna (AHAK), National Archives Kaduna (NAK) and Waziru Junaidu History and Cultural

Bureau Archives, Sokoto (WJHCBAS). The information contained in the materials was perused, analysed and interpreted. In addition, specific oral data was collected through interviews and focus group discussion with relevant people in the field. Secondary sources such as textbooks, journal articles, seminar papers, theses and dissertations that raise some issues on the Sokoto people's perception and ambivalent reception of British healthcare programmes were consulted and utilized. The study adopts historical approach in analysing the data obtained from the above mentioned sources with scrutiny in order to arrive at informed opinions. Materials produced in the distant past had been compared with those produced in the near past as well as contemporary ones. Moreover, secondary sources were evaluated through corroboration with primary sources.

An overview of colonial medicine in Africa

Colonial medicine entailed healthcare programmes that were developed and popularized in the Western Europe, and introduced by the colonial masters in their colonies. Colonial medicine played a vital role in the colonization process and in the sustenance of colonial regimes. The medicine was a tool that greatly facilitated overseas' expansion of the British Empire. In the expansion process, ships' doctors did their best to ensure the health of sailors, explorers, traders and their slaves as well as military recruits on long voyages. Military doctors and nurses looked after the health of British colonizers and vaccinations as well as prophylactic measures against malaria and other diseases of warm climates helped the British and European colonizers in general to penetrate into areas that had previously been considered too hazardous.[11] Generally, Colonial aspirations were often the crucible of trans-regional efforts to improve health in order to reach other usually extractive goals. It all started in the 15th century modern world by the efforts of colonial states to protect human property in the New World colonies. The high mortality rate caused by tropical diseases in the New World attracted colonial concern. For example, during the Spanish occupation of Haiti there was a population of 375, 000 living on the Island of Hispaniola all of whom died of measles and smallpox by the 17th century. This was the pattern all over the colonies in the New World.[12] This was the reason why the British Imperial Government encouraged special studies of westernized tropical medicine and its application to her tropical colonies. It was hoped that, the studies and their applications would result in great improvement in the healthiness of the colonized, with subsequent increase in their material prosperity and economic development. The British colonial experiences of high mortality rate caused by tropical diseases in the New World became the backdrop of her colonial health care programmes in Africa. The interest of safeguarding European traders and colonial officials brought about the provision of colonial health services starting from Slave Trade through Legitimate Trade to colonial periods. During Slave and Legitimate trades, physicians ensured the health of sailors and traders, and likewise they played a central role in the colonization process of Africa.[11] This is clearly said by Lyautey, the French Field Marshal in the conquest of Morocco that, "the physician, if he understands his role, is the most effective of our agents of penetration and pacification".[13]

A number of medical historians have noted that colonial medicine was programmed to serve the aims and ambitions of the British Imperial Government rather than the interest of the colonized.[14–19] They have shown that colonial health services occupied a place within a more expansive ideological order of the British Empire. Colonial efforts to deal with the health problem of the colonized were in many instances closely linked to the economic interests of the Imperial Government. Health was not an end in itself, but a prerequisite for colonial development. According to them colonial medicine was concerned primarily with maintaining the health of the Europeans living in the colonies, because they were keys for the success of the colonial project. The health of the colonized was only considered when their ill health threatened overall colonial economic interests. Accordingly, the success or failure of health interventions was measured in terms of the colonies' production than by measuring the levels of health among the indigenous population. With regards to the introduction of colonial health care system for safeguarding the health of Europeans, Vaughan says: Epidemic diseases posed a constant threat to the economic viability of the colonial state. The rise of tropical medicine was an outcome of the continuing threat posed by epidemic diseases to the entire colonial enterprise. As in the case of India, also in Africa, the early medical provision was entirely oriented towards protecting the lives of the Europeans in the continent.[20] Thus, the application of colonial medicine in Africa was in the first instance to ensure the survival of Europeans in what was tagged as the "White Man's Grave". This became all the more necessary when it was discovered that quite a number of European explorers died during their expeditions in tropical Africa. For example, during Macgregor Laird's expedition to Niger in 1832, 39 of the 48 members of his expedition died. Richard Lander, the great explorer perished with 39 members of his expedition.[21] In another expedition in 1841, headed by Captain Trotter 48 out of 145 members of the expedition died and the rest were broken in health and eventually, the tropics had taken their toll. [21] Consequently, tropical medicine was moderated to ensure how without reasonable loss of life, Europeans can rule tropical regions. Thus, by the beginning of the 20th century, the London School and the Minto House School of Tropical Medicine were in existence for the purpose. Similarly, for the first three decades in British Universities, young graduates mostly took tropical medicine as a specialist area.[22]

In Nigeria, the account of colonial medicine began with explorers and traders who brought doctors to cater for their well-being and, for their slaves. They were followed by the missions' and military doctors whose services were primarily tools for winning converts and colonial conquest in the country.[23] For instance, in all the expeditions in the conquest of Nigerian area, medical officers took part in the expeditions. During the Kano-Sokoto campaigns two medical officers and a number of nurses accompanied each expedition.[24]

Epidemic and endemic diseases caused hundreds of death among the people of Sokoto Province.[22]For example, from the epidemic of smallpox in 1919 to that of 1928, the recorded mortalities among the indigenous population of two million people were over 170,924.[25,26] This was off course disturbing to the British economic interest, as the deaths were among the tax-payers and cash-crops producers in the area. Likewise, the prevalence of diseases most importantly malaria threatened the health of the colonial officials in the Province.[27,28] For example, in 1928, Scott C.V. and Mr. Smallwood J.H Assistant Divisional Officers suffered from serious malaria that threatened their lives.[29,30] This was believed to be the reason for the compulsory application of the principle of colonial medicine to the people of Sokoto Province. The economic consideration in the application of the medicine became clear when concentration was made around economic imperatives and urban centres of Province. The emphasis was on worker productivity and therefore, other areas were not given due attention.[31] For instance, the colonial healthcare interventions were only there in the areas of the province where production of cash-crops

and payment of taxation were stable. This is not peculiar to either the British or Sokoto Province, but all over colonial Africa. According to Rodney[32] enlightened self-interest made the colonizers realize that more could be gained out of Africans who maintained basic health. In cash-crop producing countries of Africa, the tendency was the increase in healthcare services but the decrease in the colonies which produced few goods to be shipped abroad. Africans in Gold Coast, Uganda and Nigeria were considered better off than in Dahomey, Tanganyika and Chad.

The inception of British healthcare programmes in Sokoto

A number of studies indicate that up to 1920 there had been not a single medical institution in the Sokoto Province.[7,33,34] The only available colonial healthcare programmes in the area were in the form of environmental sanitation and sporadic vaccination campaigns during epidemics. According to these studies, it was because of the mistrust of the colonial officials and missionaries among other reasons that the curative aspect of colonial medicine could not find ground in the Province. Likewise, the vaccination campaigns were carried out amidst serious rejection; and Sokoto people refused to be receptive to the colonial environmental sanitation programmes. The studies are accurate as per the reason for the peoples' apathy to the colonial medicine. But with regard to the beginning of medical institutions in the area, archival materials indicate that the studies are not sufficient. This is because two dispensaries were established in the two cities of Sokoto and Gusau in the province during the first quarter of 1905.[35] Even though the dispensaries could not attract meaningful attendance and eventually faded away, the inception of colonial medical institutions in the Province can be evidently attributed to their establishments.

However, the records of sustained colonial medical institutions in Sokoto could be attributed to the establishment of a dispensary in Sokoto by Sokoto Native Authority in 1920. It was the first dispensary that survived the Sokoto peoples' abhorrence of colonial healthcare programmes. The dispensary was only attended by the traditional rulers, their kin and kith throughout its first decade of operation; while the general public remained suspicious. The suspicion of the institution by the general public delayed further establishment of additional dispensary until in 1930s.[34] Although colonial healthcare programmes tended to make headway among some Sokoto people in due course, quite a number of Sokoto people continued to reject the programmes up to Nigerian independence in 1960.

Some public health legislations

The Sokoto people's incessant ambivalent reception and sometimes total rejection of colonial healthcare programmes led to the enforcement of legislations to ensure the desired results in the application of the programmes. A number of ordinances were enacted, and the first of such enactments was in 1930 when the Public Health Rules of Native Authorities were adopted. The provisions of the Ordinance made it mandatory upon all individuals to abide by the sanitary rule and compulsory vaccination. However, the application of the rule had not been satisfactory, and diseases continued to be firmly established.[36–38] Consequently, the Ordinance was followed by 1933; 1934; 1936 and 1938 Public Health Ordinances. Almost all the ordinances provided similar legislations on public health with slight disparities. All the rules in the ordinances were enforced with varying success and failures.[39] The most comprehensive and all-inclusive of all the ordinances was that of 1938. The Ordinance stated that inter-alia, all adults and children in Sokoto Province shall be to be regularly vaccinated; every individual infected with disease shall be put in quarantine and every compound shall have a pit-latrine and be kept clean. [39]

Through voluntary observance and enforcement measures of the ordinances, some progress were made in the acceptance of colonial healthcare programmes as some people began to abide by the rules.[40] However, this does not mean that the issue of mistrust, suspicion and consequently, rejection of colonial healthcare programmes was completely eliminated. This is because quite a number of Sokoto people continued to reject vaccinations; and they neither attended colonial medical institutions, nor did they abide by sanitary rules.

Sokoto people's perception and reaction to the british healthcare programmes

Generally, African perception of colonial health care system was largely upon the mistrust and suspicion of Europeans by Africans. The adverse perception of colonial healthcare system was worsened by the attitudes of European physicians towards Africans. The end product of trade treaties and relations between Europeans and Africans, in which the former became the masters of the latter, had exacerbated the mistrust and suspicion against colonial healthcare programmes. Likewise, the existence of traditional healthcare system contributed in the apathy against colonial healthcare programmes. The following sub-sections are on the mistrust and suspicion of colonial regime as well as the existence of indigenous health practice as the major factors that informed Sokoto people's irresolute acceptance of colonial healthcare programmes.

Mistrust and suspicion of the colonial regime

The mistrust and suspicion of colonial regime first stemmed from the Europe-African relations that turned from trade to conquest and subsequently, colonial administration. In this regard, Sokoto people became suspicious of anything about the British including hospitals, dispensaries and clinics established in the colonial period. The suspicion was derived from their experiences starting from signing of treaties and the falsification of the contents of those treaties to the physical colonial conquest by the British.[41,42] It is based on this that, Fanon[43] claimed that Africans perceived Europeans as having ulterior motive of dictating their conscience to dance to their tune through colonial injections and drugs. The suspicion continued with the attitudes of European medical officers all over Africa. For example, British colonial medical officers perceived African patients as sources of diseases, presenting diffuse complaints without clearly defined ailments. They made African patients objects of derision and emphasized on informing them that African medical customs were savage. Thus, Africans understood this as a manifestation of the British arrogance and their desire to humiliate them and change their conscience to be inferior British subjects.[13] According to Fanon[43] again, African patients perceived colonial doctors through the atmosphere of mental confusion. He based his convictions on the notion that the clinical relationship was one based on trust. By virtue of their illnesses, patients were by definition vulnerable; and they exposed their vulnerability to doctors in exchange for cure. As part of this relationship, and with the understanding of confidentiality, they shared intimate information with doctors that they never offered

anybody: information about family history, sexuality, behaviour and addictions. They do so because of trust that the free giving of this information was essential for their care; hence patients placed their confidence in the doctors' authority. However, the involvement of the colonial doctors in the British colonization of the Sokoto Caliphate breached that trust between the doctors and the patients among the Sokoto people. Moreover, the use of coercion worsened the suspicion of both colonial regime and healthcare programmes. The exploitation of traditional institutions to enforce vaccination programmes was a form of indirect rule in colonial medical enterprise. The encounter between the colonizers and the colonized in this regard was not direct but Sokoto people perceived the traditional rulers as collaborators of colonial officers who after being a link through which British ruled, wanted to be a link through which British want to adulterate their conscience.

Consequent upon the mistrust of colonial regime, the people of Sokoto rejected colonial healthcare practice when it was introduced. A number of informants.[44–46] confirmed that nothing led to the abhorrence of the British healthcare programme by Sokoto people than the suspicion of the colonial regime. They claimed that as indigenous colonial staff, they used health education to persuade them to accept the programmes. However, quite a number of the people continued to be suspicious of not only the regime, but the indigenous colonial staff. In response to the attitudes, the Colonial Government promulgated laws on compulsory sanitation and vaccination.[44] But Sokoto people remained all the more suspicious and continued to defy the rules until punitive measures were taken. Fines were imposed on the defaulters of the regulations.[47] Also, in spite of the punitive measures, a number of women continued to hide their children when vaccinating teams were around their areas; and likewise a number of Sokoto people neither patronized medical institutions nor did they have regard for environmental sanitation because they had no trust in the entire colonial healthcare programmes.[46]

Indigenous perception of disease and healthcare practice

The history of traditional health care practice in Africa is as old as the history of Africans. In the process of mastering their continent, Africans developed healing traditions that were holistic, dynamic and open to cross-cultural and continual changes. Thus, Sokoto people had a system of healing and prevention of disease before colonial healthcare programmes were introduced.[48] This and their perception of what causes disease and illness informed one of the reasons why they had negative response to colonial healthcare programmes. With regard to perception of disease, like several other groups in Hausaland; Sokoto people had traditional beliefs in illness causation. The causes of illness in Hausa cultural beliefs included supernatural, natural, mystical as well as hereditary and genetic; all of which supernatural is the most conflicting belief with modern medical science introduced by the British.[49] The beliefs were used in identifying the nature of any illness and the guidelines to be observed for treatment. Sokoto people's perception of illness causation is in sharp contrast with that of modern healthcare practice which is based on positivism. Positivism is a doctrine that states the only authentic knowledge is scientific knowledge, and that such knowledge can only come from positive affirmation of theories through strict scientific method, refusing every form of metaphysics. For example, 'Germ Theory' states that microorganisms and other bacteria like Tubercule bacilli in the case of tuberculosis are the causes of ill-health. The theory was affirmed through experimentations over the time and such preventive and curative drugs (anti-septic and anti-biotic) against the infections of germs (microorganisms) were developed.[50] Contrarily, the Sokoto people's belief in supernatural cause of illness is firmly established on the basis of the existence of supernatural beings locally called *Iskoki*. Sokoto people had the belief that rivers, hills and some tress possess spirits capable of causing diseases and illnesses. Thus, spirits were worshipped through cultism and spirit possession *Bori* in order to please them and avoid their wrath. In this circumstance, whatever illness befell an individual, it is associated with the spirit and references had to be made to them so that remedy could be obtained.[51] In the same vein spirits are categorized into black and white, in which the former category is believed to cause such illnesses like polio locally called *Shan'inna* and madness, called *Hauka*. But the latter class is believed to provide cures for some illnesses caused by the black spirits.[52] This became the basis why a typical Sokoto man believed that his fellow Sokoto people can cause him artificial illness and also cure him by the use of the spirits.[52] The belief that supernatural beings cause illnesses is not peculiar to the people of Sokoto. For instance, the Tiv people of Central Nigeria associated some illnesses to the spirit called *Akumbo* and likewise, the Yoruba people of western Nigeria attributed some illnesses like smallpox to the wrath of supernatural beings.[53]

Responding to diseases and illnesses, Sokoto people developed indigenous healthcare system which according to the WHO[54] definition is the sum total of their knowledge, skills and practices based on theories, beliefs and their experiences. Unlike British healthcare programmes which were science-based programmes, the theories in Sokoto practice are not scientifically affirmed through careful experimentations. The knowledge of the practice was indigenous to Sokoto people's culture and it involved the use of herbs and herbal knowledge blended with some aspects of spiritually.[55] It is very difficult to point out exactly when indigenous healthcare practice came into being in Sokoto but it could be dated back to the great ancestors of the people in the area.[55] According to Gbenenee the beginning of creation coincided with the idea of sickness and possible cure using roots, herbs, invocations, casting of spell in numerous dimensions. This has been based on the beliefs and worldview of the very cultural groups affected.[56] Right from the beginning of sedentary life, a number of Sokoto people had some sort of private family herbalists and there were professionals in the field.[57] In this regard, Bunza concludes that, the origin of traditional or indigenous healthcare practice in Hausaland and Sokoto in specific is as old as the Hausa people.[55] However, history indicates how medical knowledge is acquired in Hausa society. Medicine is called *Magani* in Hausa Language and the word itself was coined during Hausa peoples' efforts to acquire medicinal knowledge. The word *Magani* is a combination of *Ma* (let us) and *Gani* (see). Whenever, a Hausa person was sick, some leaves were used to attest their medicinal value, by saying *Mayi Ma Gani* (let us use them and see); from there the word *Magani* surfaced.[58] In the words of Soforowa, the origin of traditional medicine was the careful observation on plants and herbs, to test the efficacious ones for cure. Such examination is said to be done through the effects of some plants on animals.[55] For instance, it was observed that pregnant goats about to deliver used to chew the bark of the atoa tree. Through the observations, it was established that the bark had the ingredients to check bleeding after delivery; and thus, it was used to stop excessive bleeding after childbirth by humans.[59] Other findings

indicate that some medicinal herbs proved to possess the cure of a certain disease were tried on some related illnesses to ascertain their efficacy to cure the later illnesses.[60] Consequent upon the Sokoto people efforts to provide remedies for illnesses, they developed a tradition of healthcare system. The practitioners of the system are trained through apprenticeship which begins in childhood and reaches professional level at old age.[61] The knowledge of traditional healthcare practice is handed over from one generation to another. It is acquired also through spirit inspiration, dream and animal-lead in the area. Most of the traditional medical practices in Sokoto are associated with the practitioner's traditional occupations. Some practitioners in the area included *Yan-bori* (diviners), *Yan Magore* (herbalists), *Madora* (bonesetters), *Unguwar Zomai* or *Ar-bikai* (traditional birth attendants) *Masunta* (fishermen) and *Mahauta* (butchers)[60]

Over the centuries the above identified practitioners developed causative, preventive and therapeutic methods of traditional medical practices. With regard to therapy, patients were required to drink, bathe, or rub medicine on their body. Other forms of therapies included incantation which is described as a form of play on words written or delivered orally in poetic form to conjure up forces efficacious into medicine. Massage, blood-letting and puncturing were also some of the major traditional methods of healing in Sokoto.[55] Therefore, when colonial healthcare programmes were introduced by the British in area, it became very difficult for Sokoto people to abandon what was handed over to them by their forefathers. Added to that, is the fact that they believed in the efficacy of their indigenous healthcare practice to take care of their health as the tradition did to their ancestors. On this ground, quite a number of Sokoto people, as in the case of other African societies, had ambivalent attitudes to colonial healthcare programmes. The irresolute reception of modern healthcare system continued up to post-colonial period because of the existence of Sokoto indigenous healthcare practice. For example, it is still common to see the relatives of admitted patients "smuggle" into hospitals for them, the medicine from traditional healers.

Conclusion

The paper has brought from obscurity the Sokoto people's perception of the British Healthcare programmes with aim of contributing to the existing literature on the African construction of colonial medicine. It is clear that the most contentious issue regarding the acceptance of the British healthcare programmes was whether the programmes were introduced out of sympathy for Sokoto people, or for the sustenance of colonial exploitation. The irresolute acceptance of programmes revolved around mistrust and suspicion that Sokoto people had for colonial regime; as well as the existence of their indigenously developed healthcare tradition. So, Sokoto people constructed British healthcare programmes to be part of the broader colonial medicine intended to cure and exploit the colonized. The suspicion continued up to the post-colonial period and affects the contemporary global public healthcare interventions among the Sokoto people. For instance, the usage of legislations, traditional rulers and punishment measures to ensure the acceptance of colonial vaccinations increased the suspicion and was not unconnected with the irresolute acceptance that characterized contemporary polio immunization programme in the area. The memories of the British activities that served the economic exploitation of their colonies are still fresh in the minds of the Sokoto people.

Acknowledgments

None.

Conflicts of interest

The author declares no conflicts of interest.

Funding

None.

References

1. Annual Reports for 1903/No./437/Northern Nigeria, Printed and Published by Darling & Son Ltd.
2. Annual Reports for 1924/No./1245/Nigeria, Printed by His Majesty Stationary Office
3. Cecelia ST. R Ajetunmobi, editor. Health in Lagos. *The Evolution and Development of Lagos State.* Publication of Centre for Lagos Studies (CEFOLAS). Adeniran Ogunsanya College of Education, Etta. 2003.
4. Wada M. Kano Native Authority and the Provision of Modern Health care Services, 1903-1967. *PhD. Thesis.* Bayaro University Kano. 2011
5. NAK/SOKPROF/3601/Medical Policy.
6. NAK/SOKPROF/S.520/Medical Service Sokoto Province
7. Labbo A. Colonial Medicalization of Health in Nigeria: An Historical Survey of Modern Medical Services in Argungu Emirate, 1930-1960. *Lapai Journal of Central Nigeria History.* 2012;6(2).
8. NAK/SOKPROF/4208B/Argungu Division Quarterly Report, June, 1936.
9. NAK/SOKPROF/7339/Incidences of Epidemics in Sokoto Province.
10. NAK/SOKPROF/1210/Kangiwa Dispensary.
11. Ernst W. Colonial Psychiatry, Magic and Religion the Case of Mesmerism in British India. *His of Psychiatry.* 2004;15(57 Pt 1):57–71.
12. Farmer P. Colonial Medicine Vs Post-colonial Medicine and their Legacies: Facts and Myths. *Societies of the World.* 2009;25.
13. Keller RC. Geographies of Power, Legacies of Mistrust: Colonial Medicine in the Global Present. *Historical Geography*. 2006;35.
14. Arnold D. *Colonizing the Body: State Medicine and Epidemic Disease in Nineteenth-century India.* Berkeley (CA): University of California Press; 1993.
15. Marks S. What is Colonial about Colonial Medicine? And What has happened to Imperialism and Health. *Social History of Medicine,* 1997;10(2):205–219.
16. Anderson W. Where is the Postcolonial History of Medicine? Essay Review. *Bull Hist Med.* 1998;72(3):522–530.
17. Arnold D. *Imperial Medicine and Indigenous Societies.* Manchester: University Press;1998.
18. Davidovitch N, Greenberg Z. Public Health, Culture, and Colonial Medicine: Smallpox and Variolation in Palestine during the British Mandate". *Public Health Reps.* 2007;122(3):398–406.
19. Bivins R. Coming "Home" to (Post) Colonial Medicine: Treating Tropical Bodies in Post-War Britain. *Social History of Medicine.* 2012;26(1):1–20.
20. Vaughan M. *Curing their Ills Colonial Power and African Illness.* Stanford University Press; 1991.

21. Muffett DJM. *Concerning Brave Captains: Being A History of the British Occupation of Kano and Sokoto and the Last Stand of the Fulani Forces.* Andre Deutsch Limited; 1964.

22. Renbourne ET. Life and Death of the Solar Tropics. *Journal of Tropical Medicine and Hygiene.*1963;16.

23. Ajovi S. The Evolution of Health care Systems in Nigeria: Which Way Forward in the Global Present. *A Paper Presented at UW Medical School's Global Health Seminar,* December. 2010.

24. Ikime O. *The Fall of Nigeria.* Heinemann Educational Books. 1977.

25. NAK/SOKPROF/70/1919/Provincial Annual Report for 1919.

26. NAK/SOKPROF/FILENO.86/1906/Sokoto Provincial Annual Report of 1906.

27. NAK/SOKPROF/229/Provincial Annual Report for 1929.

28. AHA/SOKPROF/19/02/A.14/ Provincial Annual Report 1956, Printed by Government Printer, Northern Government, Kaduna, December, 1933.

29. HAK/SOKPROF/445/1920

30. NAK/SOKPROF/446/1928/Sokoto Provincial Annual Report for 1928

31. Randall P. *The Making of a Tropical Disease: A Short History of Malaria*. Baltimore: Johns Hopkins University Press; 2007.

32. Rodney W. *How Europe Underdeveloped Africa.* Panaf Publishing Inc; 1972.

33. Ubah NC. Administration of Kano Emirate under the British, 1900-1930. *Ph.D. Thesis*. University of Ibadan; 1973.

34. Tibenderana PK. *Sokoto Province under British Rule, 1903-1939: A Study in Institutional Adaptation and Culturalization of a Colonial Society in Northern Nigeria*. Nigeria: Ahmadu Bello University Press;1988.

35. NAK/SNP/7/185/1911/Sokoto Provincial Summary of Principal Events and Annual Report, 1905-9

36. WJHCB/SOKPROF/MED/5/Public Health and Sanitation 1930-1961.

37. AHA/ Annual Report of Ministry of Health Northern Region of Nigeria for the Year 1955-1956, Printed by Government Printer, Northern Government, Kaduna.

38. AHA/19/23/396/Annual Report of Ministry of Health Northern Region of Nigeria for the Year 1957-1959, Printed by Government Printer, Northern Government, Kaduna.

39. NAK/SOKPROF/6547/Native Authority Public Health Ordinances 1933/1938.

40. Schram R. *A History of the Nigerian Health Services.* Ibadan University Press; 1971.

41. Argungu IM. Former Zonal Health Co-ordinator, Birnin-Kebbi Zonal Office. 72 years. *Interview* at his Residence Argungu town, Kebbi State, Nigeria. 2016.

42. Sokoto AI. Former Zonal Health Co-coordinator, Zuru Zonal Office. 71 years. *Interview* at his Residence, Sokoto town, Sokoto State, Nigeria; 2016.

43. Fanon F. *A Dying Colonialism.* In: Haakon Chevalier, editor. New York Grove; 1965.

44. Dandare AA. (22/08/2014). Indigenous Colonial Healthcare Staff. 75 years, *Interview* at his Residence, Argungu town, Kebbi State, Nigeria.

45. Ba'are AA. Colonial Healthcare Staff. 78 years. *Interview* at his Residence, Chibiki town of Arewa Local Government Area, Kebbi State, Nigeria. 2015.

46. Dansabo AUM. Indigenous Colonial Healthcare Staff. 74 years. *Interview* at his Residence, Birnin-Kebbi, Kebbi State, Nigeria. 2016.

47. NAK/SOKPROF/Annual Report No. 6 for the year 1914/ FILENO.581/1914

48. Bui MN. Colonial Healthcare Staff. 87 years. *Interview* at his Residence*,* Argungu*,* Kebbi State, Nigeri; 2015.

49. Amzat J, Razum O. Health, Disease, and Illness as Conceptual Tools", *Medical Sociology in Africa,* Switzerland: Springer International Publishing; 2014.

50. Campbell WC. Germ Theory Calendar. 2007.

51. Ekwueme IO. Curator National Museum, Sokoto, The Sociology of Argungu Fishing Festival. An Unpublished Prepared Paper; 1978.

52. Bunza AM. *Gadon Fede Al'ada*, Lagos: Tiwal; 2006.

53. Aluko MAO. Illness: Causes and their Meanings among Yoruba". In T Falola, MM Heaton, editors. *Traditional and Modern Health Systems in Nigeria.* Asmara Africa: World Press; 1973.

54. WHO "Traditional Medicine". Fact Sheet, No 134. 2008

55. Bunza MU. The Contribution of Amirul Muminina Muhammad Bello (1781-1837) to the Development of Medicine in Nineteenth Century Hausaland. *M.A. History*, UDUS. 1995.

56. Gbenenee N. The Role of Traditional Medicine in Primary Health care Delivery. *International Journal of Development in Medical Sciences.* 2009;2(1&2).

57. Gado M. Traditional Medical Practitioner, 60 years. *Interview*, at his Business Centre, Shafarma Village of Augie Local Government Area, Kebbi State, Nigeria. 2015.

58. Gobir YA. Tasirin Iskokiga Cutuka da Magungunnan Hausawa. *PhD. Thesis*, Department of Nigerian Language, UDUS. 2012.

59. Asare-poku K. *West African Traditional Religion*. Singapore: Far Eastern Publishers. 1978.

60. Mai 'Yarkwar MM. Famous Traditional Medical Practitioner. 60 years. *Interview* along the roadside while selling his herbal medicine in Sokoto town, Sokoto State, Nigeria. 2016.

61. Bukkie GY. The Role of Traditional Healers in a Western-Scientific Medical System. *Nigeria Magazine*. 1983.